

to group A (staged PCI for non-IRA within 7-10 days after AMI) and group B (no staged PCI group) according to whether do staged PCI for non-IRA. In group B, subsequent PCI for non-IRA was recommended only for ischemia evidence. Optimized medical therapy was administrated for all of patients according to clinical guideline and a doctor term of cardiology was respond for follow-up and provide directions of professionals at regular intervals. The primary outcome was recurrence of myocardial infarction and death from cardiac causes in 24 months follow-up visit. The secondary outcomes were revascularization, heart failure, angina and rehospitalization from cardiac causes.

Results: After 24 months follow-up visit, 288 patients finished the experiment in group A (145 patients) and group B (143 patients). The primary outcome occurred in 12 patients in group A and in 15 patients in group B ($P=0.519$). There was no patient dead in the PCI operation for non-IRA in two groups. But the secondary outcomes were obviously higher in group B than those in group A, inclusive revascularization, refractory angina and rehospitalization.

Conclusions: In patients with AMI and multivessel coronary artery disease undergoing primary PCI, staged PCI within 7-10 days for non-IRA are safe and decrease the risk of revascularization, angina and rehospitalization. But staged PCI didn't reduce the risk of death from cardiac causes, myocardial infarction and heart failure.

GW25-e0400

Comparison of Left and Right Radial Approach for Primary Percutaneous Coronary Intervention in Acute ST-Segment Elevation Myocardial Infarction Patients

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Objectives: Although reperfusion time is related to clinical outcomes of patients with acute STEMI, there has been a lack of data regarding the effect of different transradial approach on reperfusion time. Therefore, we aimed to investigate the effect of transradial approach (left vs right) on reperfusion time for primary percutaneous coronary intervention (PCI) in acute ST-elevation myocardial infarction (STEMI) patients.

Methods: A total of 100 consecutive patients with STEMI were randomized to left radial approach ($n=50$) or right radial approach ($n=50$) for primary PCI. The primary end point was reperfusion time defined as the time from local anesthesia infiltration to the first balloon inflation or the beginning of thrombus aspiration in case of thrombectomy. The secondary end points included radiation exposure by measuring cumulative air kerma (CAK) and CAK dose area product (CAK DAP), fluoroscopy time, contrast use and major adverse cardiac events at 30 days.

Results: Procedural success was achieved in 49 of 50 (98%) in each radial approach. Compared with right radial approach, left radial approach had significantly shorter reperfusion time (18.1 ± 5.6 vs 16.0 ± 4.3 minutes, $P=0.037$). There were no significant differences in CAK, CAK DAP, fluoroscopy time and contrast use between the two approaches. At 30 days, no patients experienced reinfarction or stroke, and no patients required repeat PCI or bypass surgery.

Conclusions: Left radial approach is associated with a shorter time to reperfusion compared with right radial approach, and may become a feasible and attractive alternative to perform primary PCI for STEMI patients.

GW25-e0541

Analysis on the Risk Factors for Occurrence of Electrical Storm in Percutaneous Coronary Intervention

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Objectives: To investigate the risk factors for occurrence of electrical storm in the patients with acute ST segment elevation myocardial infarction (STEMI) when treat them by percutaneous coronary intervention (PCI) and provide evidence for prospective nursing.

Methods: Collected the clinical data of 280 patients with STEMI and treated by PCI from January 2008 to December 2011, the patients with no less than twice spontaneous ventricular tachycardia (VT) or ventricular fibrillation (VF) were classified to the electrical storm group and others were classified to control group.

Results: The number of patients with electrical storm is nineteen and the incidence rate is 6.8%. In early group (from January 2008 to December 2009), the number of patients with electrical storm is sixteen. In late group (from January 2010 to December 2011), the number of patients with electrical storm is three. The electrical storm group: The value of creatine kinase isoenzyme MB (CK-MB), the value of troponin I (TNI), right coronary artery being the infarction related artery (IRA), TIMI level, bradycardia and sustained hypotension in the electrical group are significantly higher than those of control group ($P<0.05$).

Conclusions: The value of creatine kinase isoenzyme MB (CK-MB), the value of troponin I (TNI), right coronary artery being the infarction related artery (IRA), TIMI level, bradycardia and sustained hypotension are the risk factors for occurrence of electrical storm. Early treatment to the risk factors can reduce the incidence of VAS, and improve the prognosis.

GW25-e0788

The effect of thrombus-aspiration combined tirofiban in the patients with ST-segment elevation myocardial infarction (STEMI) after the direct percutaneous coronary intervention

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Objectives: This study aimed to investigate the effect of thrombus-aspiration and tirofiban in the patients with ST-segment elevation myocardial infarction (STEMI) during the primary percutaneous coronary intervention (PCI).

Methods: A total of 98 consecutive acute STEMI patients received primary PCI in the First People's Hospital of Jingmen enrolled in this study from January 2013 through March 2014. The patients were arranged into 2 groups, including only thrombus-aspiration group (thrombus-aspiration group, $n=48$) and thrombus-aspiration combined with tirofiban group (Combined group, $n=50$). We compared the different targets among the two groups, including the baseline profiles, immediate post-operative CAG (coronary angiography) and follow-up data.

Results: (1) No significant baseline differences existed among 2 groups (all $P>0.05$). (2) Compared with the thrombus-aspiration group, the post-operative Thrombolysis In Myocardial Infarction (TIMI) grade, rate of TIMI 3, post-operative 90 mins 50% ST-segment elevation resolution (STR) were significantly lower than Combined group ($P<0.05$), the rate of no-reflow was significantly higher than Combined group ($P<0.05$). There were no significant differences in the rate of hemorrhage and mortality in hospital among 2 groups ($P>0.05$). (3) After followed-up 6 months, there were no statistically significant differences in mortality, rehospitalization for angina and MACE, but the left ventricular ejection fraction (LVEF) of Combined group were more higher than thrombus-aspiration group ($P<0.05$).

Conclusions: The combination of thrombus-aspiration and tirofiban were useful for reducing thrombus burden, preventing the rate of no-reflow and improving myocardial microvascular reperfusion and Cardiac Function in patients with STEMI after the direct PCI.

GW25-e0851

Relation of elevated C-reactive protein and interleukin-6 levels to recurrence of atrial fibrillation after catheter ablation of paroxysmal atrial fibrillation

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Objectives: It is prevalent for recurrence of atrial fibrillation after catheter ablation of paroxysmal atrial fibrillation. The objectives of this study were to investigate the relation of elevated C-reactive protein and interleukin-6 levels to recurrence of atrial fibrillation after catheter ablation of paroxysmal atrial fibrillation.

Methods: To analyze retrospectively the clinical data of 94 patients with paroxysmal atrial fibrillation who underwent radiofrequency catheter ablation by circumferential pulmonary vein isolation (CPVI). Patients were allocated to success group (72) and recurrence group (22 cases) according to the symptoms, 12-Leads ECG and Holter ECG after 6 months follow-up. The levels of cardiac troponin T (cTnT), lactate dehydrogenase (LDH), and creatine kinase myocardial band (CKMB) were determined at different time points. Enzyme-linked immunosorbent assay and immune turbidimetric method were used to determine the concentration of interleukin-6 (IL-6) and high specific C-reactive protein (hsCRP). Cardiac structure and function were measured with 2-D echocardiogram.

Results: There was no significant difference of atrioventricular structure and function parameters, hsCRP, IL-6 and serum cardiac biomarkers in patients between success group and recurrence group before ablation. The levels of hsCRP and IL-6 were significantly lower in success group than recurrence group. However, there was no significant difference of atrioventricular structure and function parameters and serum cardiac biomarkers between success group and recurrence group before ablation.

Conclusions: High levels of hsCRP and IL-6 after long periods ablation have some predictive value in evaluating early recurrence of atrial fibrillation after radiofrequency catheter ablation.

GW25-e0874

Pharmacokinetics and Pharmacodynamics of Bivalirudin (Angiomax®) in Chinese Patients Undergoing PCI

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Objectives: The primary objective was to determine the pharmacokinetics (PK) and pharmacodynamics (PD) of bivalirudin (Angiomax) after intravenous administration in Chinese patients undergoing PCI. Since bivalirudin exhibits linear dose-dependent PK and anticoagulant activity and is not subject to hepatic metabolism, PK in Chinese patients is expected to be similar to that in non-Chinese, but no data were available to date.

Methods: 20 patients undergoing a PCI at Fudan University, Zhongshan Hospital in Shanghai were randomly enrolled in this study. Bivalirudin was administered as a 0.75 mg/kg IV bolus followed by a 1.75 mg/kg/h infusion for the duration of the PCI procedure. The mean \pm SD duration of infusion was 45 ± 27.7 min and mean total dose